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Hristo Iankov Bojinov

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EXAMINER

COLAN, GIOVANNA B

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/803,788	Applicant(s) BOJINOV ET AL.	
	Examiner GIOVANNA COLAN	Art Unit 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 30-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 30-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/01/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is issued in response to applicant filed request for continued examination (RCE) on 11/12/2007.
2. Claims 1 – 5 have been amended. Claims 30 - 64 were added. Claims 6 – 29 were canceled.
3. Claims 1 – 5, and 30 – 64 are pending in this application.
4. Applicant's arguments with respect to amended claim 1 – 5 and added claims 6 – 28 have been considered but are moot in view of the new ground(s) of rejection.

Information Disclosure Statement

5. The information disclosure statement (IDS) was submitted on 05/01/2006. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Continued Examination Under 37 CFR 1.114

6. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/11/2006 has been entered.

Specification

7. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "computer readable media" in claim 38 lacks of antecedent basis.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 31, 39 – 44, and 52 – 57 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The limitation "...as permitted" in claim 31; and "permitting...to be acted upon..." in claim 39, 52 appears to cover anything and everything that does not prohibit actions from occurring (also included in 112 second rejection included in this office action). Therefore, absent recitation of any code or steps for causing a computer to do anything, instead just ensuring there's no code or steps which prohibit it, there does not appear to be a useful, concrete and tangible result.

To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application is either

disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application with useful, concrete and tangible result.

“Software per se” is non-statutory under 35 USC 101 because it is merely a set of instructions without any defined tangible output or tangible result being produced. The requirement for tangible result under 35 USC 101 is defined in *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 149 F.3d 1368, 47USPQ2d 1596 (Fed. Cir. 1998).

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 30-31, 33, 39-44, 40, 46, 51-57, 59, and 64 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitation “...as permitted” in claim 31, 33, 40, 46, 51, 59, and 64; and “permitting...to be acted upon...” in claim 39, 52 renders the claims indefinite. It's unclear what Applicant's intended metes and bounds of the claim are, since the claim appears to cover anything and everything that does not prohibit actions from occurring.

With respect to claims 30, 31, 33, 40, 46, 51, 53, 59, and 64, the limitation “sending another file request by the client to the server” and the limitation “receiving the another request by the proxy” are unclear. Specifically, it is unclear how “the another

request", which is sent to the server, is received by the proxy. It is unclear whether the proxy is located in the server, whether "the another request" is "the another file request", or whether there is a missing step.

With respect to claim 46 and 59, the limitation "...to the metadata..." (lines 4 – 5) lacks of antecedent basis.

Appropriate correction is required.

Any claim not specifically addressed, above, is being rejected as incorporating the deficiencies of a claim upon which it depends.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1 – 2, 4 – 5, and 30 – 34, 36 – 40, 42 – 47, 49 – 53, 56 – 60, 62 – 64 are rejected under 35 U.S.C. 102(e) as being anticipated by Chandrashekhhar et al. (Chandrashekhhar hereinafter) (2005/0033988 A1).

Regarding Claims 1, 32, and 38, Chandrashekhar discloses a method for establishing identity in a file system, comprising:

receiving a file request concerning an indicated file from a client, the request received by a proxy (Page 4, [0059] - [0061], Chandrashekhar);

forwarding the request from the proxy to a file server (Page 4, [0062] - [0065], Chandrashekhar);

returning a reply associated with the file request from the file server to the proxy (Page 4, [0066], Chandrashekhar);

inserting, by the proxy, metadata into the file handle (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhar and also see Page 4, [0077] and [0078], Chandrashekhar); and

sending, by the proxy, the file handle with the metadata inserted in the file handle to the client, the metadata to be used in further requests to identify the client and the indicated file (Page 4, [0070], Chandrashekhar).

Regarding Claims 2, 34, 47, and 60, Chandrashekhar discloses a method, further comprising the step of:

using the metadata in the file handles for any of eliminating a need for the proxy to generate additional requests to the server to establish file identity, and for completing client requests (Page 4, [0085], Chandrashekhar).

Regarding Claims 4, and 36, Chandrashekhhar discloses a method, further comprising:

using an NFS file system as the file system (Page 3, [0037], Chandrashekhhar).

Regarding Claims 5, and 37, Chandrashekhhar discloses a method, further comprising:

using a stateless protocol by the file system (Page 3, [0037], Chandrashekhhar).

Regarding Claims 30, and 33, Chandrashekhhar discloses a method, further comprising:

sending another file request by the client to the server (Page 4, [0085] and [0059], Chandrashekhhar);

including the metadata in a further file handle sent with the another request (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhhar and also see Page 4, [0077] and [0078], Chandrashekhhar);

receiving the another request by the proxy (Page 4, [0061], Chandrashekhhar);

identifying, in response to the metadata, the client as permitted to submit the another file request (Page 4, [0068], Chandrashekhhar);

sending the another request to the file server and not sending the metadata with the another file handle to the file server (Page 4, [0070], Chandrashekhhar); and

receiving by the proxy the further reply from the file server, and sending by the proxy the further reply to the client (Page 4, [0070], Chandrashekhhar).

Regarding Claim 31, Chandrashekhar discloses a method for establishing identity in a file system, comprising:

receiving a first file request concerning an indicated file from a client, the first file request received by a proxy (Page 4, [0059] - [0061], Chandrashekhar);

forwarding the first file request from the proxy to a file server (Page 4, [0062] - [0065], Chandrashekhar);

returning a reply associated with the first file request from the file server to the proxy (Page 4, [0066], Chandrashekhar);

inserting, by the proxy, metadata into the file handle (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhar and also see Page 4, [0077] and [0078], Chandrashekhar);

sending, by the proxy, the file handle with the metadata inserted in the file handle to the client, the metadata to be used in further requests to identify the client and the indicated file (Page 4, [0070], Chandrashekhar);

sending a second file request by the client to the server (Page 4, [0085] and [0059], Chandrashekhar);

including the metadata in a second file handle sent with the second file request; receiving the second file request by the proxy (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhar and also see Page 4, [0077] and [0078], Chandrashekhar);

identifying, in response to the metadata, that the client is permitted to submit the second file request (Page 4, [0068], Chandrashekhar);

sending the second file request to the file server and not sending the metadata with the second file handle to the file server (Page 4, [0070], Chandrashekhar); and

receiving by the proxy a second reply from the file server, and sending by the proxy the second reply to the client (Page 4, [0070], Chandrashekhar).

Regarding Claims 39, and 45, Chandrashekhar discloses a method for establishing identity in a file system, comprising:

receiving a first file request concerning an indicated file from a client, the first file request received by a proxy (Page 4, [0059] - [0061], Chandrashekhar);

forwarding the first file request from the proxy to a file server (Page 4, [0062] - [0065], Chandrashekhar);

permitting the request to be acted upon by the file system in response to a predetermined protocol (Page 4, [0068], Chandrashekhar);

returning a reply associated with the first file request from the file server to the proxy (Page 4, [0066], Chandrashekhar);

inserting, by the proxy, a session key into the file handle (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhar; and also see Page 4, [0077] and [0078], Chandrashekhar); and

sending, by the proxy, the file handle with the session key inserted in the file handle to the client, the session key to be used in further requests to identify the client and the indicated file (Page 4, [0070], Chandrashekhar).

Regarding Claims 40, and 46, Chandrashekhar discloses a method, further comprising:

sending a second file request by the client to the server (Page 4, [0085] and [0059], Chandrashekhar);

including the session key in a second file handle sent with the second file request (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhar and also see Page 4, [0077] and [0078], Chandrashekhar);

receiving the second file request by the proxy (Page 4, [0061], Chandrashekhar);

identifying, in response to the session key, that the client is permitted to submit the second file request (Page 4, [0068], Chandrashekhar);

sending the second file request to the file server and not sending the session key with the second file handle to the file server (Page 4, [0070], Chandrashekhar); and

receiving by the proxy a second reply from the file server, and sending by the proxy the second reply to the client (Page 4, [0070], Chandrashekhar).

Regarding Claims 43, and 49, Chandrashekhar discloses a method, further comprising:

using a NFS protocol as the predetermined protocol (Page 3, [0037], Chandrashekhar).

Regarding Claims 44, and 50, Chandrashekhar discloses a method, further comprising:

using as the predetermined protocol a two way communication exchange between the proxy and the file server (Fig. 1, Chandrashekhar).

Regarding Claim 51, Chandrashekhar discloses an apparatus to establish identity in a file system, comprising:

a proxy to receive a first file request sent by a client to a file system, the proxy to forward the first file request to a file server (Page 4, [0059] - [0061], Chandrashekhar);

the file server to return a reply associated with the first file request to the proxy (Page 4, [0066], Chandrashekhar);

the proxy to insert a session key into a file handle (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhar and also see Page 4, [0077] and [0078], Chandrashekhar);

the proxy to send the file handle with the session key inserted in the file handle to the client, the session key to be used in a second file request to identify the client and the indicated file (Page 4, [0070], Chandrashekhar);

the client to send a second file request to the server, the client to include the session key in a second file handle sent with the second file request (Page 3 and 4,

[0055] and [0067] – [0069]; respectively, Chandrashekhar and also see Page 4, [0077] and [0078], Chandrashekhar);

the proxy to receive the second file request, and the proxy to identify, in response to the session key, the client as permitted to submit the second file request, and the proxy to send the second file request to the file server and not to send the session key with the second file handle to the file server (Page 4, [0085] and [0059], Chandrashekhar); and

the proxy to receive a second reply from the file server, and the proxy to send the second reply to the client (Page 4, [0070], Chandrashekhar).

Regarding Claims 52, and 58, Chandrashekhar discloses a method for establishing identity in a file system, comprising:

receiving a first file request concerning an indicated file from a client, the first file request received by a proxy (Page 4, [0059] - [0061], Chandrashekhar);

forwarding the first file request from the proxy to a file server (Page 4, [0062] - [0065], Chandrashekhar);

permitting the request to be acted upon by the file system in response to a predetermined protocol (Page 4, [0068], Chandrashekhar);

returning a reply associated with the first file request from the file server to the proxy (Page 4, [0066], Chandrashekhar);

inserting, by the proxy, a cryptographic information into the file handle (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhar; and also see Page 4, [0077] and [0078], Chandrashekhar);

sending, by the proxy, the file handle with the cryptographic information inserted in the file handle to the client, the cryptographic information to be used in further requests to identify the client and the indicated file (Page 4, [0070], Chandrashekhar).

Regarding Claims 53, and 59, Chandrashekhar discloses a method, further comprising:

sending a second file request by the client to the server (Page 4, [0085] and [0059], Chandrashekhar);

including the cryptographic information in a second file handle sent with the second file request (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhar and also see Page 4, [0077] and [0078], Chandrashekhar);

receiving the second file request by the proxy (Page 4, [0061], Chandrashekhar);

identifying, in response to the cryptographic information, that the client as permitted to submit the second file request (Page 4, [0068], Chandrashekhar);

sending the second file request to the file server and not sending the cryptographic information with the second file handle to the file server (Page 4, [0070], Chandrashekhar); and

receiving by the proxy a second reply from the file server, and sending by the proxy the second reply to the client (Page 4, [0070], Chandrashekhar).

Regarding Claims 56, and 62, Chandrashekhar discloses a method, further comprising:

using a NFS protocol as the predetermined protocol (Page 3, [0037], Chandrashekhar).

Regarding Claims 57, and 63, Chandrashekhar discloses a method according, further comprising:

using as the predetermined protocol a two way communication exchange between the proxy and the file server (Fig. 1, Chandrashekhar).

Regarding Claim 64, Chandrashekhar discloses an apparatus to establish identity in a file system, comprising:

a proxy to receive a first file request sent by a client to a file system, the proxy to forward the first file request to a file server (Page 4, [0059] - [0061], Chandrashekhar);

the file server to return a reply associated with the first file request to the proxy (Page 4, [0066], Chandrashekhar);

the proxy to insert a cryptographic information into a file handle (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhar and also see Page 4, [0077] and [0078], Chandrashekhar);

the proxy to send the file handle with the cryptographic information inserted in the file handle to the client, the cryptographic information to be used in a second file request to identify the client and the indicated file (Page 4, [0070], Chandrashekhar);

the client to send a second file request to the server, the client to include the cryptographic information in a second file handle sent with the second file request (Page 4, [0085] and [0059], Chandrashekhar);

the proxy to receive the second file request, and the proxy to identify, in response to the cryptographic information, the client as permitted to submit the second file request, and the proxy to send the second file request to the file server and not to send the cryptographic information with the second file handle to the file server (Page 4, [0085] and [0059], Chandrashekhar); and

the proxy to receive a second reply from the file server, and the proxy to send the second reply to the client (Page 4, [0070], Chandrashekhar).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. Claims 3, 35, 41, 48, 54 – 55, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chandrashekhar et al. (Chandrashekhar hereinafter) (2005/0033988 A1) in view of Ohazama et al. (Ohazama hereinafter) (US 7,225,207 B1).

Regarding Claims 3, and 35, Chandrashekhar discloses all the limitations as discussed above including a method, further comprising: encoding metadata in a form of a session key into the file handle. However, Chandrashekhar does not expressly disclose that such session expires. Ohazama discloses: a session key which expires after a predetermined amount of time (Col. 7, lines 60 – 63, Ohazama). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Ohazama's teachings to the system of Chandrashekhar. Skilled artisan would have been motivated to do so, as suggested by Ohazama (Col. 7, lines 55 – 63, Ohazama), to provide validate the user and restrict access to the database, and to prevent old session keys from being stolen or reused.

Regarding Claims 41, and 48, the combination of Chandrashekhar in view of Ohazama discloses a method according to claim 39, further comprising:

causing the session key to expire after a selected amount of time (Col. 7, lines 60 – 63, Ohazama).

Regarding Claims 42, the combination of Chandrashekhar in view of Ohazama discloses a method, further comprising:

causing the session key to expire after a selected amount of usage (Col. 14, lines 7 – 14, Ohazama).

Regarding Claims 54, and 61, the combination of Chandrashekhar in view of Ohazama discloses a method, further comprising:

causing the cryptographic information to expire after a selected amount of time (Col. 7, lines 60 – 63, Ohazama).

Regarding Claim 55, the combination of Chandrashekhar in view of Ohazama discloses a method, further comprising:

causing the cryptographic information to expire after a selected amount of usage (Col. 14, lines 7 – 14, Ohazama).

Prior Art Made Of Record

1. Xu et al. (US Patent No. 6,324,581 B1, issued: November 27, 2001).
2. Vahalia et al. (US Patent No. 6,389,420 B1).
3. Chandrashekhar et al. (2005/0033988 A1).
4. Ohazama et al. (US 7,225,207 B1).

Points Of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GIOVANNA COLAN whose telephone number is (571)272-2752. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Giovanna Colan
Examiner
Art Unit 2162
February 29, 2008

**/Jean M Corrielus/
Primary Examiner, Art Unit 2162**